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The Pending Claims

Prior to the entry of these Amendments, Claims 1-11, 13-18, 26 and 33-50 are pending.

The Office Action

Claims 18,33 and 35-50 are rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 1,2,4,10,11,13,14 and 26 are rejected under 35 U.S.C. §102(b) as being anticipated by Liu et al.

Claims 3,5-9,15-17 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Amendments

Applicants have canceled Claims 2 and 34, and amended Claims 1, 3-5, 10-11, 13-15, 18, 26, 33, 38-39, and 40-42 as noted above.

Support

Support for each of the amendments to the claims is provided by the claims as filed.

In addition, the amendment to Claim 1 in which the phrase -- one or more members -- has been added is supported, for example, on page 4, lines 1-9, and page 6, lines 9-11.

Support for the amendment to Claim 38 is found, for example, in Claim 5 as filed and on page 3, lines 8-11, page 4, lines 31-32, page 6, lines 30-35, and page 16, line 37.

Response to Rejections and Objections

Claim Rejections - 35 USC § 112, second paragraph

This rejection is avoided by the amendments to the claims.

Claim 18 has been made definite by the amendment to Claim 18, which is now directed to "deconvoluting the pool of cloned test transcription factor polynucleotides -- when said pool comprises more than one transcription factor polynucleotide -- ", and by the amendment to Claim 3, which is now directed to "-- one or more members -- of the pool of cloned test transcription factor polynucleotides". Thus, the meaning of the claim is now clear, since one may deconvolute more than one member of the pool when the pool comprises more than one transcription factor polynucleotide.

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Claim 33 has been amended to include the limitations of dependent Claim 34, so that the claim incorporates the deconvolution step and thus addresses the Examiner's concern regarding the missing step. This also addresses this part of the rejection of the remaining claims that depend from Claim 33.

The amendments of Claims 39-42 have been made in accordance with the Examiner's suggestion, said suggestion being appreciated by Applicants. Claim 38 has been amended, and the pathway gene -- promoter-- of this claim, for which there is antecedent basis, --is operably linked-- to a biosynthetic pathway gene.

Accordingly, Applicants respectfully request that the rejection of these claims under 35 USC § 112, second paragraph, be withdrawn.

Claim Rejections - 35 USC § 102(b)

This rejection has in part been avoided by the amendment to the claims, and is in part traversed.

As Claim 3 was indicated to be allowable (except for the objection based on being dependent from rejected Claim 1), former Claims 1 and 3 have been combined into amended Claim 3, and former Claims 3 and 26 have been combined into amended Claim 26. Claims that formerly depended from Claim 1 now depend from Claim 3. As such, the latter dependent claims are not anticipated by Liu et al.

The limitations of Claim 2 have been incorporated into Claim 1, and Claim 2 has been cancelled. Applicants respectfully disagree with the statement of the Examiner that "Liu teaches all of the elements set forth in claims 1,2,4,10,11,13,14 and 26". The Liu reference does not, in fact, teach a method of determining whether a member of a pool of cloned test transcription factor polynucleotides encodes a plant pathway transcription factor, where a member of the cloned test transcription factor polynucleotide pool is selected on the basis of structural similarity to a known transcription factor for a pathway gene. In the Liu reference, DREB1A and DREB 2A were identified using a yeast one-hybrid screening system (see, for example, the section of text beginning on p. 1392, column 2, first three paragraphs of Results, as well as Figure 1. Only after DREB1A and DREB2A were identified was structural analysis conducted, an important distinction from the present invention as represented by presently amended Claim 1 (see, p. 1393, second column, paragraph 2: "Structural Analysis of the DREB1A and DREB2A cDNAs". Liu et al. were attempting to identify transcription factors with EREBP/AP2 binding domains and then confirm function (see, for example, the text beginning on page 1396, column 1, last three lines: "To determine whether the DREB1A and DREB2A proteins are capable of transactivating DRE-dependent transcription in plant cells..."). Thus, DREB1A and DREB2A polynucleotides were not selected on the basis of results obtained in plant cells, and they were not identified in a screening method on the basis of structural similarity to a known transcription factor for a pathway gene, which are important distinctions from the present invention as represented by presently amended Claim 1.

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Accordingly, Applicants respectfully request that the rejection of these claims under 35 USC § 102(b) be withdrawn.

Claim Objections

Claim objections have been addressed by amending the present independent and intervening claims to address the Examiner's rejections, and by amending the number of the claims from which the objected-to claims depend.

CONCLUSION

In view of the above amendment and remarks, it is submitted that this application is now ready for allowance. Early notice to that effect is solicited. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned at (510) 259-6138.

Applicants believe that no additional fee is due with this communication. However, if the USPTO determines that a fee is due, the Commissioner is hereby authorized to charge Mendel Biotechnology, Inc. Deposit Account No. 501025. This form is enclosed in duplicate.

Respectfully submitted,

MENDEL BIOTECHNOLOGY, INC.

Jeffrey M. Libby, Ph.D.

Reg. No. 48,251

21375 Cabot Boulevard Hayward, California 94545 Phone: (510) 259-6120 Fax: (650) 845-4166

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